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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF CORNADO UTILITIES, INC. FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY TO PROVIDE WASTEWATER SERVICE IN PINAL COUNTY, ARIZONA.	DOCKET NO: SW-04305A-05-0086
IN THE MATTER OF THE APPLICATION OF CORONADO UTILITIES, INC., AN ARIZONA CORPORATION, FOR AUTHORITY TO ISSUE SHORT AND LONG-TERM DEBT INSTRUMENTS IN CONNECTION WITH FINANCING THE ACQUISITION OF THE WASTEWATER UTILITY PLANT OF BHP COPPER, INC. AND CONSTRUCTING IMPROVEMENTS THERETO.	DOCKET NO. SW-04305A-05-0087 **(Consolidated)** **NOTICE OF FILING DIRECT TESTIMONY OF JASON P. WILLIAMSON**

Pursuant to the December 20, 2005 Procedural Order, Coronado Utilities, Inc., ("Applicant"), an Arizona corporation, hereby files this Notice of Filing the Direct Testimony of Jason Williamson in the above-captioned matter. Attached hereto as Exhibit A is the Direct Testimony of Jason Williamson. Mr. Williamson provides testimony addressing concerns expressed by the Commission during its December 6, 2005 Open Meeting. Specifically, Mr. Williamson provides testimony concerning Applicant being fit and able to serve in light of an incident involving the death of a Santec Corporation employee on October 24, 2001. Additionally, Mr. Williamson proposes a

new three-tier rate design in response to concerns expressed by the Commission over potential "rate-shock" to ratepayers in San Manuel, Arizona.

RESPECTFULLY SUBMITTED this 28th day of December, 2005.

FENNEMORE CRAIG, P.C.

By _____
Jay L. Shapiro
Patrick J. Black
Attorneys for Coronado Utilities, Inc.

ORIGINAL and 15 copies of the foregoing filed this 28th day of December, 2005 with:

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Phoenix, Arizona 85007

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By _____

1746916/12923.001

EXHIBIT

A

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DIRECT TESTIMONY OF JASON P. WILLIAMSON

I. INTRODUCTION.

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jason P. Williamson and my business address is 6825 E. Tennessee, Suite 547, Denver Co 80224.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am the Managing Member of Pivotal Utility Management, LLC and a member of its affiliate, Pivotal Operations, LLC, ("collectively hereinafter, "Pivotal"). Pivotal owns and/or operates a total of eight water and sewer utilities in Arizona, seven of which are regulated by the Commission. The other is a sewer system owned by an HOA, which Pivotal manages and operates under contract. I also hold positions in several of the utilities, including the applicant, Coronado Utilities, Inc. ("Coronado"), for which I hold the position of President.

Q. WHO ARE THE OTHER PRINCIPALS IN PIVOTAL?

A. John Clingman and Dwight Zemp. Mr. Clingman has also filed testimony in this docket at this time. However, Mr. Zemp and Mr. Clingman have no role in the day-to-day operations and management of Pivotal or its operating affiliates. I am primarily responsible for such operations.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION IN THIS PROCEEDING?

A. Yes. I have testified twice before the presiding administrative law judge and twice been subjected to cross-examination. I also appeared on behalf of Pivotal and Coronado at the Commission's December 6, 2005 Open Meeting when the two applications in this docket were considered.

Q. WHY ARE YOU SUBMITITNG THIS ADDITIONAL TESTIMONY AT THIS STAGE OF THE PROCEEDING?

A. The purpose of my testimony is to address concerns raised by the Commissioners during that Open Meeting. Specifically, the Commission has remanded this matter back for further evidence concerning: (1) whether Coronado is fit and able to serve in light of an incident involving the death of a Santec Corporation ("Santec") employee in October, 2001, at a wastewater treatment plant in Yuma, Arizona; and (2) whether rates for services provided by Coronado should be phased in over three phases.

Q. HAVE THESE ISSUES BEEN PREVIOUSLY ADDRESSED IN THIS PROCEEDING?

A. Yes. A two phased rate structure was developed and recommended by Coronado and Staff. During the first phase, the average residential customer's monthly rate was to be discounted by roughly 35%. *See* November 18, 2005 Recommended Opinion and Order ("ROO") at 13-15. Phase two would commence when construction of the new wastewater treatment plant was completed. Obviously, we felt this was a substantial benefit to customers facing substantial rate increases, as did Administrative Law Judge Rodda, who adopted the recommended rate design in her ROO, albeit with the first phase rate further reduced from the proposal by Coronado and Staff.

The death of the Santec employee was raised by Staff in June, 2005. We worked with Staff to provide information on the incident, the criminal proceedings that followed and the relationship of Santec to Coronado and Coronado's new Certificate of Convenience & Necessity ("CC&N") and financing applications. Staff issued a supplemental report on August 31, 2005, recommending safety

conditions it believed would further protect the public, and we readily accepted them. Supplemental Staff Report at 4-5; ROO at 16.

Q. DO YOU BELIEVE THE ISSUANCE OF A CC&N TO CORONADO IS IN THE PUBLIC INTEREST?

A. Without question. However, it is clear that we have not yet done enough to convince the Commission of this. It is my sincere hope that the additional testimony being submitted by Coronado and the additional proceedings will produce a record from which the Commission can conclude that the requested relief is warranted and in the public interest.

II. <u>CORONADO'S FITNESS TO PROVIDE SEWER UTILITY SERVICE</u>.

Q. WERE YOU AWARE OF THE FATAL ACCIDENT INVOLVING SANTEC BEFORE IT WAS RAISED BY STAFF IN JUNE, 2005, FOLLOWING THE FIRST HEARING DATE IN THIS DOCKET?

A Yes, but I had no knowledge of the status of the criminal proceeding against Santec until after Ms. Jaress discovered the newspaper article (in June or July) regarding the plea agreement and upcoming sentencing. While Mr. Clingman and Mr. Zemp are the owners of Santec, I am not an owner, investor, employee or consultant. My focus was and is on the utility entities that Pivotal manages, not on Santec or the status of its legal proceedings. I am responsible for the day-to-day operations of Pivotal, and while my partners are informed of our operations, as stockholders should be regularly informed, the opposite is not true, since I have no interest in Santec.

Q. BUT YOU COULD HAVE INFORMED THE COMMISSION OF THE ACCIDENT THAT RESULTED IN THE LOSS OF LIFE OF A SANTEC EMPLOYEE?

A. I could have, but I simply did not connect the dots from that tragic incident in Yuma more than four years ago and Coronado's request for a CC&N to take over sewer utility service from BHP Copper, Inc. ("BHP") in San Manuel, Arizona. It simply never occurred to me that the fatal accident, which was unrelated to me, Pivotal or Coronado, had any significance in this docket.

Q. WILL SANTEC DESIGN AND INSTALL THE NEW WASTEWATER TREATMENT FACILITY PROPOSED FOR SAN MANUEL?

A. If Santec is the successful bidder. For now, we have merely used Santec's cost estimates to assist in developing rates for Coronado. I would also like to point out that any entities contracted to design, construct, operate, maintain or repair any facility owned and operated by Coronado, or Pivotal or any other Pivotal affiliate, are required to adhere to all standards for occupational healthy and safety. We take every appropriate step to ensure our facilities are operated safely.

Q. DO YOU UNDERSTAND THE COMMISSION'S CONCERN OVER THE SANTEC INCIDENT IN THIS MATTER?

A. Anytime an occupational hazard results in fatality, regulatory agencies should be concerned. In this case, that concern should lead to the Commission scrutinizing Coronado to ensure that its is fit and able to provide the requested utility service. All of Pivotal's systems currently operate in compliance with the regulations of this Commission, as well as all other applicable local, state and federal laws and regulations.

Q. DOES PIVOTAL HAVE SAFETY POLICIES AND PROCEDURES?

A. Yes, in addition to the safety conditions recommended in this case by Staff, Pivotal and all of its operating affiliates adhere to the safety policies prescribed by the Arizona Department of Environmental Quality and the Occupational Safety and Health Administration. Attached hereto as Williamson Exh. 1 is the confined space entry procedure that is currently in the Operations and Maintenance Safety Manual at the San Manuel WWTP in San Manuel, AZ. Once Coronado closes on its purchase agreement, this safety manual will be adopted by Coronado. In addition, Pivotal has reviewed the safety procedures and safety manuals at every utility it manages to ensure buildings have all proper and necessary safety equipment, signage, and that operators have the proper training and resources necessary to fulfill their duties in the safest possible manner.

Q. DURING THE OPEN MEETING, BENSCH RANCH UTILITIES, LLC WAS BROUGHT UP. IS THIS AN ISSUE THAT BEARS ON CORONADO'S FITNESS TO PROVIDE SEWER UTILITY SERVICE?

A. Not in my view, and I do not understand why it was referenced on a couple of occasions during the Open Meeting. Bensch Ranch Utilities, LLC ("BRU") is an operating affiliate of Pivotal that provides sewer utility service in Yavapai County under a CC&N issued by this Commission. *See* Commission Decision No. 67180 (August 10, 2004).

Q. **IS BRU IN VIOLATION OF ANY RULES OF REGULATION OF THE COMMISSION, OR ANY OTHER APPLICABLE LAWS?**

A. No, but during the proceedings concerning BRU's CC&N, the Commission became concerned over Lester Smith's ownership interest in the development that the utility was to serve. In short, we became aware during that proceeding that Mr. Smith was essentially a "wanted man" by the Commission and that substantial

fines imposed against him remained unpaid. However, Mr. Smith was no more than a financial investor in a real estate development our sewer utility intended to serve. He did not have, and never will have any interest in BRU, Pivotal or any affiliate. *See id.* at 4.

Unfortunately, although the Commission clearly satisfied itself before it issued the CC&N to BRU, it seems that Lester Smith issue that came up in the BRU CC&N proceeding, may have tainted some views of Pivotal. I respectfully suggest that is unfair. Given the facts, as described above, I trust that the Commission will not allow Mr. Smith's unrelated interest in a real estate development to impact its assessment of Pivotal's operations, or its decision in this proceeding.

III. THREE PHASE RATE PROPOSAL.

Q. **YOU MENTIONED EARLIER THAT CORONADO IS OFFERING A PROPOSED THREE PHASE RATE STRUCTURE. WHY IS CORONADO MAKING SUCH A PROPOSAL AT THIS TIME?**

A. Because at the December 6, 2005 Open Meeting, the Commission also expressed concern about the substantial rate increases residents and businesses in San Manuel would experience when BHP-subsidized sewer utility service comes to an end.

Q. **HOW MUCH DO CUSTOMERS CURRENTLY PAY FOR SEWER SERVICE IN SAN MANUEL?**

A. Residential customers currently pay $4 per month or $48 per year for sewer service by BHP. Businesses pay approximately $60 per year. Under the rates proposed by Staff and Coronado and slightly amended in the ROO, those same residential customers would pay $27.00 per month until construction of the new treatment plant is complete, and $46.50 per month once the new facility is placed in service. ROO at 25. Obviously, these are substantial increases, however, the evidence

before the Commission plainly shows that such rates are just and reasonable because they are at a level necessary to allow Coronado to recover its operating expenses and provide it opportunity to earn a fair rate of return on its utility property.

Q. WHAT IS CORONADO'S PROPOSAL FOR ADDING A THIRD PHASE TO THE RATE STRUCUTRE?

A. The phase one rates would remain at $27.00, commencing with issuance of an order by the Commission granting the requested CC&N and other relief. Then, when the new treatment facility is complete, a new, second phase of rates would be implemented for twelve (12) months. The proposed second phase rates would be as follows:

- Monthly Customer Charges:
  Residential: $37.00
  Commercial: $7.50
  Mobile Home Park: (winter only) $7.50
  School: $7.50
- Volumetric Rates (based on number of units)
  Commercial – per 100 gallons of usage: $0.81
  Mobile Home Park – per 100 gallons of usage: $0.47
  Schools – per 100 gallons of usage: $0.2561

All other rates during the second phase would be as recommended in the ROO.

Then, after 12 months, a third and final phase of rates, equal to what is currently proposed as the second phase of rates, as recommended by Staff and Coronado and adopted in the ROO, would be implemented. I would also note that all phase changes would be proceeded by at least thirty (30) days notice to customers.

Q. BUT MR.WILLIAMSON, DIDN'T YOU TESTIFY EALRIER THAT THE RATES ADOPTED IN THE ROO ARE NECESSARY FOR CORONADO TO RECOVER ITS OPERATING EXPENSES AND EARN A FAIR RETURN?

A. Yes, I did. However, under the three phase rate structure proposed herein, Coronado's will realize the same revenue.

Q. HOW IS THAT POSSIBLE IF THE RATES WILL BE REDUCED FOR AN ADDITIONAL TWELVE MONTHS?

A. Because BHP has agreed to subsidize the rates for a twelve month period after the new treatment plant is complete. BHP will pay Coronado the difference between the revenue it would have received, but for the imposition of another rate phase, between completion of the facility and imposition of the final rates. BHP's agreement to provide this subsidy is limited to no more than the amount necessary to subsidize the second phase of discounted rates proposed herein for a twelve month period. This means that, if the Commission were to further reduce the rates in any phase, Coronado would not realize sufficient revenue to recover its operating expenses and have an opportunity to earn a fair return.

Q. THAT SOUNDS VERY FAIR TO THE FUTURE CORONADO RATEPAYERS.

A. I agree, but we have tried from the outset to take steps to smooth the transition from BHP-subsidized sewer utility service to provision of that service by a Commission-regulated public service corporation. For example, it was Coronado that proposed the two phase rate design that postpones recovery of a return on utility property. It was also Coronado that went out and obtained approval of low-cost bond financing, which reduces the rate increases being realized by customers. Coronado also agreed to nearly triple its equity investment when Staff raised

concerns that too much low-cost debt was being utilized to fund plant construction. Coronado also agreed to Staff's recommended safety measures and accepted, over its strong opposition, restrictions on the majority of its earnings. All of these things benefit the ratepayer at the expense of Coronado, Pivotal and BHP, further evidencing that the requested relief is in the public interest.

Q. DOES THAT CONCLUDE YOUR TESTIMONY?

A. Yes, except that I wish to again urge the Commission to complete its consideration of this matter and issue an order granting the requested relief at the earliest possible date, so that the ratepayer benefits described above can be realized.

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EXHIBIT

1

APPENDIX D

CONFINED SPACE ENTRY / HOT WORK PERMIT

Working in Confined Spaces

A confined space is defined as any space or structure which by design has limited openings for entry and exit, and which is not intended for continuous employee occupancy. A confined space has poor natural ventilation. Confined spaces include storage tanks, pits, silos, vats, boilers ducts sewers, pipelines, and other structures found at metal/nonmetal mines. A confined space which is immediatcly dangerous to life or health (IDLH) includes those with oxygen deficiency, explosive or flammable atmospheres, or high concentrations of toxic substances - and requires the most demanding protective measures. Any operation which generates toxic contaminants within a confined space, without proper control measures and precautions, may be dangerous to life within a short period of time.

When work is planned within a confined space, the supervisor and the miner who is to carry out the work should have an understanding as to the work to be done, the hazards that may arise, and the necessary protective measures to be taken. A work permit which contains this information in writing is highly recommended. This will provide authorization for the work, and requires that the supervisor and employee review the operation, hazards and control measures before entry and before the operation is started.

Protective and precautionary measures for work in confined spaces should involve as a minimum, the following:

1. Atmospheric testing and monitoring. Prior to entry, initial testing of the atmosphere should be carried out from the outside. Such tests should include those for oxygen content, flammability, and toxic contaminants. In accord with MSHA regulations, the oxygen content shall be at least 19.5%. If it appears that an atmosphere immediately dangerous to life may develop, it is essential that a safety belt or harness and a life line be worn by the person in the confined space. A standby person must be in attendance.

2. Training of personnel. Employees who are to work in confined spaces should be adequately trained. Such training should include understanding of the hazards involved, entry and exit procedures, safety equipment, emergency first aid, control measures such as ventilation, use of appropriate respirators if required, and proper work practices.

3. Standby person. When work is conducted within a confined space, a standby person should be stationed on the outside. This person should be trained in emergency rescue and first-aid procedures, and should have communication equipment as necessary for contact with those working inside, and for immediate contact with medical, ambulance, fire fighting, and other rescue personnel if needed. MSHA regulations require that such person be present if the

atmosphere in the confined space is dangerous (IDLH). The standby person should be familiar with and have available appropriate respiratory protection equipment.

4. Safety equipment and clothing. Employees working in confined spaces must have available and use appropriate safety equipment and clothing - such as eye and face protection, proper gloves and full-coverage work clothing where indicated, and safety belt or harness with lifeline in dangerous atmospheres. MSHA regulations have specific requirements for such safety equipment and clothing. Hearing protection in the form of ear plugs or muffs is required where noise levels exceed MSHA standards. Personal respiratory protection may be necessary if ventilation is not sufficient to control contaminants to the permissible exposure limits. This may be in the form of supplied-air respirators or self-contained breathing apparatus and is recommended where contaminants from welding, painting, solvent cleaning or other operations generating toxic contaminants are involved.

5. Warning signs. Warning signs of a confined space and the hazard should be posted near entrances. When work is not in progress, the entrance should be blocked. When work is in progress, the standby person should ensure that unauthorized persons do not enter the restricted area.

6. Purging and ventilation. Purging of the confined space to remove contaminants should be done before entry by means of a high rate of general ventilation. Atmospheric testing is then in order. Atmospheric testing is then in order. The main environmental, or engineering, control of suspected or known contaminants during operations is general ventilation. Design of the system will vary. Continuous general ventilation is recommended for most operations where contaminants are generated. This may be supplemented or replaced by local exhaust ventilation. Personal respiratory protection may be required in addition to general and/or local exhaust ventilation. Monitoring of contaminants during operations is indicated if there is doubt about the effectiveness of controls.

Attention to the protective and precautionary measures outlined above is essential for assurance that exposures within confined spaces are controlled.

If you have any questions about this or any other occupational health matter, feel free to ask us. Our job is protecting your health.

Contact:

Mine Safety and Health Administration
Metal and Nonmetal Health Division
4015 Wilson Boulevard
Arlington, Virginia 22203-1983

Phone: 703-235-8307

Work Permits - Confined Space Entry

1.0 Introduction

The purpose is to establish a uniform procedure and provide protection to employees entering areas identified as confined space areas as per OSHA 1910.146 and NOSA 5.52.

2.0 Definition

A permit-required confined space is any space large enough and so configured that an employee can bodily enter and perform assigned work.

It has limited or restricted means for entry or exit. Examples: tanks, vessels, silos, storage bins, boilers, furnaces.

It is not designed for continuous employee occupancy.

3.0 Characteristics of a Confined Space

Confined space has one or more of the following characteristics:

1. Contains or has the potential to contain a hazardous atmosphere.
2. Contains a material which has the potential for engulfing the entrant.
3. Has an internal configuration such that any entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section.
4. Contains any other recognized serious safety or health hazard.

4.0 Permit-Required Confined Space Areas

All heads of departments are responsible to list permit-required confined space locations in their area of responsibility.

5.0 Duties

1. Work team leaders are responsible to know the hazards which may be faced during entry, including:

    a. Information on the mode of entry.
    b Signs or symptoms.
    c. Consequences of exposure

2. The work team leader verifies, by checking that appropriate entries have been made on the permit, all tests specified by the permit have been conducted and all procedures and equipment specified by the permit are in place before endorsing the permit and allowing the entry to begin.

3. The entry work team leader can terminate the entry and cancel the permit when:

    a. Operations covered by the entry permit have been completed.
    b. A condition which is not allowed under the entry permit arises in or near the permit space.

4. The entry work team leader verifies that rescue services are available and that the means of summoning them are operable.

5. The entry work team leader shall remove unauthorized individuals and investigate the occurance.

6. The entry work team leader determines whenever responsibility for a permit-space entry operation is transferred and, at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with the terms of the entry permit and that acceptable entry conditions are maintained.

6.0 Authorized Entrant

Heads of departments shall ensure that all authorized entrants:

1. Know the hazards which may be faced during entry and include the following:

    a. Information on the mode of entry.
    b. Signs or symptoms.
    c. Consequences of the exposure.

2. Know the proper use of the following:

    a. Testing and monitoring equipment.
    b. Ventilation equipment.
    c. Communications.
    d. Personal protective equipment.
    e. Lighting equipment.
    f. Barriers/flagging required.

g. Ladders for safe ingress and egress.
h. Rescue and emergency equipment.

3. The authorized entrant must communicate with the assigned door attendant as necessary to enable the attendant to monitor the entrants' status and to alert the entrants of a need to evacuate the space if necessary.

4. The authorized entrant must alert the assigned attendant whenever:

   a. The entrants recognize any warning sign or symptom of exposure to a dangerous situation.
   b. The entrant detects a prohibited condition.

5. The authorized entrant must exit from the permit space as quickly as possible whenever:

   a. An order to evacuate is given by the assigned attendant or the entry work team leader.
   b. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.

7.0 Assigned Attendants

Heads of departments shall ensure that all assigned attendants:

1. Knows the hazards that may be faced during entry, including the following:

   a. Information on the mode of entry.
   b. Signs or symptoms.
   c. Consequences of the exposure.

2. The assigned attendant is aware of possible behavioral effects of hazard exposure in authorized entrants.

3. The attendant continuously maintains an accurate count of authorized entrants in the permit space and ensures the means to identify the authorized entrants (listed on the permit) is accurate.

4. The attendant remains outside the permit space during entry operations until relieved by another attendant.

5. The attendant communicates with the authorized entrants, as necessary, to monitor the entrant status and to alert entrants of the need to evacuate, should it arise.

6. The attendant monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the space immediately under any of the following conditions.

    a. If the attendant detects a prohibited condition.
    b. If the attendant detects behavioral effects of hazard exposure in an authorized entrant.
    c. If the attendant detects a situation outside the space which could endanger the authorized entrant.
    d. If the attendant cannot effectively and safely perform all of his/her duties as described.

7. The attendant shall summon rescue services as soon as he/she determines the authorized entrants need assistance to escape from the confined space hazards.

8. The attendant takes the following actions when unauthorized persons approach or enter a permit space while entry is underway.

    a. Warns the unauthorized persons they must stay away from the permit space.
    b. Advises the unauthorized persons they must exit immediately if they have entered the permit space.
    c. Informs the authorized entrants and the entry work team leader that unauthorized persons have entered the permit space.
    d. Performs no duties which might interfere with his/her primary duty to monitor and protect the authorized entrants.

8.0 Rescue and Emergency Service

1. The Safety Department shall ensure that each member of the Rescue and Emergency Services is provided with and trained to use the personal protective equipment and rescue equipment necessary for making rescues from permit spaces.

2. Each member of the Rescue and Emergency Service shall be trained to perform his/her assigned rescue duties.

3. Each member of the Rescue and Emergency Service shall practice making permit-space rescues at least once every 12 months. The practices shall include the following:

   Simulated rescue operations in which they remove dummies, mannequins or actual persons from the actual permit space, or from representative permit spaces.

   Representative permit spaces shall, with respect to opening size, configuration and accessibility, simulate the types of permit spaces from which a rescue is to be performed.

4. Each member of the Rescue and Emergency Service shall be trained in basic first aid and in cardiopulmonary resuscitation (CPR).

   At least one member of the Rescue and Emergency Service holding a current certification in first aid and CPR shall be available.

   Day/Night entries shall be on standby status only.

   Shutdown modes shall require the Rescue team to be on the plant site for the shutdown duration.

   The company shall inform all exposed employees, by posting danger signs or other equally effective means, of the existence and location of and the danger posed by permit spaces.

   A sign reading 'DANGER—PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER" or other similar language would satisfy the requirement.

9.0 Permit System

The permit system is the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

10.0 Retrieval System

The retrieval system means the equipment used for a non-entry rescue of persons from inside a permit space.

11.0 Testing

Testing is the process by which the hazards which may confront entrants of a confined space are identified and evaluated.

Testing includes specifying the tests which are to be performed in the permit space.

The atmosphere within the space shall be periodically tested to ensure the continuous forced air ventilation is preventing the accumulation of a hazardous atmosphere.

12.0 Isolation

Isolation is the process by which a permit space is removed from service and is completely protected against the release of energy and material into the space by such means as:

a. Blanking or blinding.
b. Misaligning or removing sections of lines, pipes or ducts.
c. A double block and bleed system.
d. Lockout/tagout of all sources of energy.
e. Blocking or disconnecting all mechanical linkages.

13.0 Line Breaking

Line breaking is the intentional opening of a pipe, line or duct which is or has been carrying flammable, corrosive or toxic material, an inert gas or any fluid at a volume, pressure or temperature capable of causing injury.

14.0 Permit Duration

The duration of the permit may not exceed the time required to complete the assigned task or job as identified in the "Purpose of Entry" section on the permit form.

Recordkeeping of Canceled Permits

The company shall retain each canceled entry permit for at least (1) one year to facilitate the review of the permit-required Confined Space Program.

Any problem encountered during an entry operation shall be noted on the pertinent permit so the appropriate revisions to the Permit Space Program can be made.

15.0 Oxygen Deficient Atmosphere

Oxygen enriched atmosphere is an atmosphere containing more that 23.5% oxygen by volume.

Oxygen deficient atmosphere is an atmosphere containing less than 19% oxygen by volume.

16.0 Ventilation

Continuous forced air ventilation shall be used as follows:

a. An employee may not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.
b. The forced air ventilation shall be so directed as to ventilate the immediate areas where an employee is or will be present within the space **and** shall continue until all employees have left the space.
c. The air supply for the forced air ventilation shall be from a clean source and may not increase the hazards in the space.

17.0 Immediately Dangerous to Life or Health (IDLH)

IDLH is any condition which poses an immediate or delayed threat to life or which would cause irreversible adverse health effects or would interfere with the individuals' ability to escape unaided from a permit space.

18.0 Hot Work Permit

A hot work permit is the employer's written authorization to perform operations (for example: riveting, welding, cutting, burning and heating) capable of providing a source of ignition.

19.0 Host Employer

When the company (host employer) arranges to have employees of another employer (contractor) perform work which involves permit-space entry, the host employer shall:

a. Inform the contractor that the work place contains "permit-required spaces" and that permit-space entry is allowed only through compliance with this Permit Space Procedure.

b. Apprise the contractor of the elements, including the hazards identified and the host employee's experience with the space, which make the space in question a permit-required space.
c. Apprise the contractor of any precautions or procedures which the host employer has implemented for the protection of employees in or near permit spaces where the contractor employees will be working.
d. Coordinate entry operations with the contractor when both host employer personnel and contractor personnel will be working in or near the permit spaces.
e. Debrief the contractor at the conclusion of the entry operations regarding the Permit Space Program and any operations regarding the Permit Space Program and any hazards confronted or created during entry operations.

20.0 Entry Permit

The Entry Permit is the permit which documents compliance and authorizes entry into a permit space.

The following information must be listed on the Space Entry Permit:

a. List the permit space to be entered.
b. List the purpose of the entry.
c. List the date and the authorized duration of the entry permit.
d. List by name the authorized entrants into the permit space.
e. List by name the personnel serving as attendants.
f. List by name the individual currently serving as entry work team leader, with a space for the signature or initials of the entry work team leader who originally authorized the entry.
g. List the hazards of the Permit Space to be entered.
h. List the measure used to isolate the Permit Space and the measures used to eliminate or control the hazards before entry.
i. List the acceptable entry conditions.
j. List the results and locations of initial and periodic tests performed, accompanied by the names or initials of the testers.
k. List information on how to call rescue services.
l. List the communication devices used by authorized entrants and attendants to maintain contact during the entry.
m. List all equipment, such as personal protective equipment, testing equipment, communications equipment, alarm

systems and rescue equipment, to be provided for compliance.

n. List any other information whose inclusion is necessary, given the circumstances of the particular confined space, in order to ensure employee safety.

o. Also list any additional permits, such as Hot Work Permit, which have been issued to authorize work in the permit space.

p. **The entry permit shall be posted at the entry location for the duration of the entry.**

21.0 Rescue Team Notification and Release Notification

1. The entry work team leader shall call ext. 3269 or 3296 prior to each permit-required entry and advise security to place the rescue team on "standby".

   The exact location of the entry shall be identified.

   Upon completion of the entry, the entry work team leader shall call ext. 3269 or 3296 and advise security to place the rescue team on "stand-down" status.

   Both calls shall be documented on the Confined Space Entry Permit.

2. Security Action - Upon receiving notification of a permit-required entry from the entry work team leader the security officer shall:

   a. Complete form (attachment #2) on "standby" information and enter information in Confined Space Log Book.

   b. Upon receiving notification of the termination of confined space entry from the entry work team leader, the security officer shall complete form (attachment #2) on "stand-down" information and enter information in Confined Space Log Book.

   If rescue from the confined space is requested, notification is given to the San Manuel Fire Department via the command phone.

Attachment 2 - Form for security officer's use.

22.0 Threshold Limit Value (TLV)

1. The TLV is determined by the American Conference of Industrial Hygienists.

2. The TLV is a guideline for control of potential health hazards.

3. The TLV is intended as a recommendation.

23.0 Permissible Exposure Limit (PEL)

1. The PEL is determined by OSHA.

2. The PEL sets limits for legal unprotected worker exposure to a particular toxic substance.

24.0 Preparing for the Entry

1. Obtain an entry permit.

2. Test the atmosphere in the space and assure it is acceptable for entry.

3. Install ventilation when needed.

4. Assign authorized entrants and train them to the hazards.

5. Assign attendants and train them to the hazards and their duties.

6. Notify the rescue team through security.

7. Assure all energy sources are locked/tagged-out: See section 12.0 on page 6.

8. Instruct the attendant on the procedure to take and record periodic testing.

9. Establish communications between authorized entrants and the attendant.

10. Obtain and set up all special equipment, flagging, barriers, etc. to protect employees around the space area.

11. Complete the Entry Permit Form and post it at the entry.

25.0 During the Entry

During the entry the entry work team leader shall be responsible for the following:

1. Monitor activities of authorized entrants and attendant.

2. Assure the atmosphere is acceptable.

3. Assure equipment, flagging, barriers, etc. are in place.

26.0 Termination of Entry

At the termination of the entry, the entry work team leader shall be responsible for the following:

1. Assure all employees are out of the space.

2. Remove the ventilation.

3. Remove locks and tags—blanks, reconnect lines.

4. Place rescue team on "stand-down" (through Security).

5. Complete the Entry Permit and give to appropriate safety coordinator for filing.

6. Remove all flagging, barriers, etc.

7. Place all equipment back in proper storage.